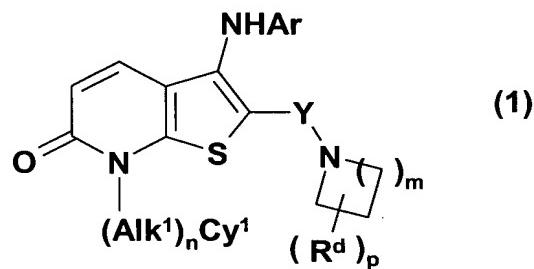


This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (currently amended) A compound of formula (1):



wherein:

Y is a linking group -C(O)- or -S(O)₂-;

n is zero or the integer 1;

m is the integer 1, 2, 3 or 4;

p is the integer 1, 2, 3 or 4;

R⁴ is an -OH, -(Alk²)OH (where Alk² is a straight or branched C<sub>1-4</sub> alkylene chain), -OR¹ (where R¹ is a straight or branched C<sub>1-6</sub> alkyl group), -(Alk²)OR¹, -NR²R³ (where R² and R³ may be the same or different and is each independently a hydrogen atom or a straight or branched C<sub>1-6</sub> alkyl group), -(Alk²)NR²R³ or a straight or branched C<sub>1-6</sub> alkyl group;

Alk² is a straight or branched C<sub>1-4</sub> alkylene chain;

R¹ is a straight or branched C<sub>1-6</sub> alkyl group;

R² and R³, which may be the same or different, are each independently a hydrogen atom or a straight or branched C<sub>1-6</sub> alkyl group;

Alk¹ is a straight or branched C<sub>1-4</sub> alkylene chain;

Cy¹ is an optionally substituted cycloaliphatic, aromatic or heteroaromatic group; and

Ar is an optionally substituted aromatic or heteroaromatic group;

and the salts, solvates, hydrates and N-oxides thereof

or a salt, solvate, hydrate, or N-oxide thereof.

2. (currently amended) A compound as claimed in claim 1 wherein R<sup>d</sup> is -OH, -(Alk<sup>2</sup>)OH, -(Alk<sup>2</sup>)OR<sup>1</sup>, -NR<sup>2</sup>R<sup>3</sup> or -(Alk<sup>2</sup>)NR<sup>2</sup>R<sup>3</sup>, ~~in which Alk<sup>2</sup>, R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are as defined in claim 1.~~
3. (currently amended) A compound as claimed in claim 1 ~~or claim 2~~ wherein Alk<sup>2</sup> is -CH<sub>2</sub>- or -C(CH<sub>3</sub>)<sub>2</sub>-.
4. (currently amended) A compound as claimed in ~~any one of the preceding claims~~ claim 1 wherein R<sup>1</sup> is methyl.
5. (currently amended) A compound as claimed in ~~any one of the preceding claims~~ claim 1 wherein R<sup>2</sup> is hydrogen or methyl.
6. (currently amended) A compound as claimed in ~~any one of the preceding claims~~ claim 1 wherein R<sup>3</sup> is hydrogen or methyl.
7. (currently amended) A compound as claimed in ~~any one of the preceding claims~~ claim 1 wherein Cy<sup>1</sup> is phenyl, fluorophenyl, chlorophenyl, methylphenyl or cyclopropyl.
8. (currently amended) A compound as claimed in ~~any one of the preceding claims~~ claim 1 wherein Ar is phenyl, difluorophenyl, (chloro)(fluoro)phenyl, (fluoro)(methyl)phenyl, chlorophenyl, cyanophenyl or methylphenyl.
9. (currently amended) A compound as claimed in claim 1 ~~as herein specifically disclosed in any one of the Examples that is~~
- 3-[(2,4-Difluorophenyl)amino]-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-b]pyridin-6(7H)-one;
- 2-{[(2R)-2-(Hydroxymethyl)pyrrolidin-1-yl]carbonyl}-3-[(3-methylphenyl)amino]-7-phenylthieno[2,3-b]pyridin-6(7H)-one;
- 3-[(3-Chlorophenyl)amino]-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-b]pyridin-6(7H)-one;

3-[(2,4-Difluorophenyl)amino]-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-(4-methylphenyl)thieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(4-Fluoro-3-methylphenyl)amino]-2-{[(2R)-2-(hydroxymethyl)-pyrrolidin-1-yl]carbonyl}-7-(4-methylphenyl)thieno[2,3-*b*]pyridin-6(7*H*)-one;

2-{[(2R)-2-(Hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-(4-methylphenyl)-3-[(3-methylphenyl)amino]thieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]-7-(4-fluorophenyl)-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl} thieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(4-Fluoro-3-methylphenyl)amino]-7-(4-fluorophenyl)-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl} thieno[2,3-*b*]pyridin-6(7*H*)-one;

7-(2-Chlorophenyl)-3-[(4-fluoro-3-methylphenyl)amino]-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl} thieno[2,3-*b*]pyridin-6(7*H*)-one;

7-(2-Chlorophenyl)-3-[(2,4-difluorophenyl)amino]-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl} thieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2-Chlorophenyl)amino]-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2-Chlorophenyl)amino]-2-{[(2S)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-Anilino-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-Anilino-2-{[(2S)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]-2-{[(2S)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-Anilino-2-{[(2S)-2-(methoxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-Anilino-2-{[(2R)-2-(methoxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

7-(4-Chlorophenyl)-3-[(4-fluoro-3-methylphenyl)amino]-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl} thieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(4-Fluoro-3-methylphenyl)amino]2-{[(2S)-2-(hydroxymethyl)-pyrrolidin-1-yl]carbonyl}-7-(3-methylphenyl)thieno[2,3-*b*]pyridin-6(7*H*)-one;

2-{[(2R)-2-(Hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-(3-methylphenyl)-3-[(3-methylphenyl)amino]thieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(4-Fluoro-3-methylphenyl)amino]2-{[(2R)-2-(hydroxymethyl)-pyrrolidin-1-yl]carbonyl}-7-(3-methylphenyl)thieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(3-Chloro-4-fluorophenyl)amino]2-{[(2R)-2-(hydroxymethyl)-pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(3-Chloro-4-fluorophenyl)amino]2-{[(2S)-2-(hydroxymethyl)-pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(4-Fluoro-3-methylphenyl)amino]2-{[(2R)-2-(hydroxymethyl)-pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(4-Fluoro-3-methylphenyl)amino]2-{[(2S)-2-(hydroxymethyl)-pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]2-{[(3*S*)-3-hydroxypyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]2-{[(3*R*)-3-hydroxypyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(4-Fluoro-3-methylphenyl)amino]2-{[(3*S*)-3-hydroxypyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(4-Fluoro-3-methylphenyl)amino]2-{[(3*R*)-3-hydroxypyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]2-{[(3*S,4S*)-3,4-dihydroxypyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]2-{[(3-hydroxyazetidin-1-yl)carbonyl]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]2-{[(2*S*)-2-(1-hydroxy-1-methylethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]2-{[(2*R*)-2-(1-hydroxy-1-methylethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2-Cyanophenyl)amino]-2-{[(2S)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2-Cyanophenyl)amino]-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-Anilino-7-(cyclopropylmethyl)-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}thieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(3-Cyanophenyl)amino]-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]-2-{[(2R)-2-(hydroxymethyl)pyrrolidin-1-yl]sulfonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

2-{[(3*R*)-3-Aminopyrrolidin-1-yl]carbonyl}-3-[(2,4-difluorophenyl)amino]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

2-{[(2*S*)-2-(Aminomethyl)pyrrolidin-1-yl]carbonyl}-3-[(2,4-difluorophenyl)amino]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

2-{[(2*R*)-2-(Aminomethyl)pyrrolidin-1-yl]carbonyl}-3-[(2,4-difluorophenyl)amino]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]-2-{[(3*R*)-3-(dimethylamino)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]-2-[(4-hydroxypiperidin-1-yl)carbonyl]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

*rac*-3-[(2,4-Difluorophenyl)amino]-2-[(3-hydroxypiperidin-1-yl)carbonyl]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

2-{[(3*R*)-3-Aminopyrrolidin-1-yl]carbonyl}-3-[(4-fluoro-3-methylphenyl)amino]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

2-{[(2*S*)-2-(Aminomethyl)pyrrolidin-1-yl]carbonyl}-3-[(4-fluoro-3-methylphenyl)amino]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(4-Fluoro-3-methylphenyl)amino]-2-{[(3*R*)-3-(dimethylamino)-pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]-2-{[(3*R*,4*R*)-3,4-dihydroxypyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;

3-[(2,4-Difluorophenyl)amino]-2-{[(3R\*,4S\*)-3,4-dihydroxypyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-b]pyridin-6(7H)-one;

3-[(2-Cyanophenyl)amino]-2-{[(3S)-3-hydroxypyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-b]pyridin-6(7H)-one;

3-[(2-Cyanophenyl)amino]-2-{[(3R)-3-hydroxypyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-b]pyridin-6(7H)-one;

rac-2-{[3-Aminopyrrolidin-1-yl]carbonyl}-3-[(2,4-difluorophenyl)amino]-7-phenylthieno[2,3-b]pyridin-6(7H)-one;

2-{[(3S)-3-Aminopyrrolidin-1-yl]carbonyl}-3-[(2,4-difluorophenyl)amino]-7-phenylthieno[2,3-b]pyridin-6(7H)-one;

2-{[(3S)-3-Aminopyrrolidin-1-yl]carbonyl}-3-[(4-fluoro-3-methylphenyl)amino]-7-phenylthieno[2,3-b]pyridin-6(7H)-one;

3-[(2,4-Difluorophenyl)amino]-7-(4-fluorophenyl)-2-{[(3R)-3-hydroxypyrrolidin-1-yl]carbonyl}thieno[2,3-b]pyridin-6(7H)-one;

3-[(2,4-Difluorophenyl)amino]-7-(4-fluorophenyl)-2-{[(3S)-3-hydroxypyrrolidin-1-yl]carbonyl}thieno[2,3-b]pyridin-6(7H)-one;

3-[(4-Fluoro-3-methylphenyl)amino]-7-(4-fluorophenyl)-2-{[(3S)-3-hydroxypyrrolidin-1-yl]carbonyl}thieno[2,3-b]pyridin-6(7H)-one;

7-(2-Chlorophenyl)-3-[(4-fluoro-3-methylphenyl)amino]-2-{[(3S)-3-hydroxypyrrolidin-1-yl]carbonyl}thieno[2,3-b]pyridin-6(7H)-one;

7-(2-Chlorophenyl)-2-{[(3S)-3-hydroxypyrrolidin-1-yl]carbonyl}-3-[(3-methylphenyl)amino]thieno[2,3-b]pyridin-6(7H)-one;

7-(2-Chlorophenyl)-3-[(2,4-difluorophenyl)amino]-2-{[(3S)-3-hydroxypyrrolidin-1-yl]carbonyl}thieno[2,3-b]pyridin-6(7H)-one;

3-[(2,4-Difluorophenyl)amino]-2-{[(3S)-3-hydroxypyrrolidin-1-yl]carbonyl}-7-(4-methylphenyl)thieno[2,3-b]pyridin-6(7H)-one;

3-[(4-Fluoro-3-methylphenyl)amino]-2-{[(3S)-3-hydroxypyrrolidin-1-yl]carbonyl}-7-(4-methylphenyl)thieno[2,3-b]pyridin-6(7H)-one;

3-[(2,4-Difluorophenyl)amino]-2-{[(3R)-3-hydroxypyrrolidin-1-yl]carbonyl}-7-(4-methylphenyl)thieno[2,3-b]pyridin-6(7H)-one;

3-[(4-Fluoro-3-methylphenyl)amino]-2-{[(3R)-3-hydroxypyrrolidin-1-yl]carbonyl}-7-(4-methylphenyl)thieno[2,3-*b*]pyridin-6(7*H*)-one;  
3-[(4-Fluoro-3-methylphenyl)amino]-2-[(3-hydroxyazetidin-1-yl)carbonyl]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;  
2-[(4-Aminopiperidin-1-yl)carbonyl]-3-[(2,4-difluorophenyl)amino]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;  
2-[(3-Aminoazetidin-1-yl)carbonyl]-3-[(2,4-difluorophenyl)amino]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;  
3-[(2,4-Difluorophenyl)amino]-2-{[4-(dimethylamino)piperidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;  
3-[(2,4-Difluorophenyl)amino]-2-{[3-(dimethylamino)azetidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;  
3-[(2,4-Difluorophenyl)amino]-2-{[(3S)-3-(dimethylamino)pyrrolidin-1-yl]carbonyl}-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one;  
2-{[(3S)-3-(Dimethylamino)pyrrolidin-1-yl]carbonyl}-3-[(4-fluoro-3-methylphenyl)amino]-7-phenylthieno[2,3-*b*]pyridin-6(7*H*)-one; or  
7-(2-Chlorophenyl)-3-[(2,4-difluorophenyl)amino]-2-{[(3R)-3-hydroxypyrrolidin-1-yl]carbonyl} thieno[2,3-*b*]pyridin-6(7*H*)-one.

10. (currently amended) A pharmaceutical composition comprising a compound of ~~formula (1) as defined in~~ claim 1, or a pharmaceutically acceptable salt, solvate, hydrate or *N*-oxide thereof, in association with a pharmaceutically acceptable carrier.

11. (canceled)

12. (currently amended) A method for the treatment ~~and/or or~~ prevention of a disorder for which an inhibitor of p38 MAP kinase is indicated, which comprises administering to a patient in need of such treatment a compound of ~~formula (1) as defined in~~ ~~claim 1~~ claim 1, or a pharmaceutically acceptable salt, solvate, hydrate or *N*-oxide thereof.

13. (new) The method of claim 12 wherein the disorder is an autoimmune disease, inflammatory disease, destructive bone disorder, proliferative disorder, neurodegenerative disorder, viral disease, allergy, infectious disease, heart attack, angiogenic disorder, reperfusion/ischemia in stroke, vascular hyperplasia, organ hypoxia, cardiac hypertrophy, thrombin-induced platelet aggregation, a condition associated with prostaglandin endoperoxidase synthetase-2 (COX-2), or a disease or disorder associated with the production of one or more of TNF, IL-1, IL-6, and IL-8.

14. (new) The method of claim 13 wherein the autoimmune disease is rheumatoid arthritis, inflammatory bowel disease, ulcerative colitis, Crohn's disease, multiple sclerosis, diabetes, glomerulonephritis, systemic lupus erythematosus, scleroderma, chronic thyroiditis, Grave's disease, hemolytic anemia, autoimmune gastritis, autoimmune neutropenia, thrombocytopenia, chronic active hepatitis, myasthenia gravis, atopic dermatitis, graft vs host disease, or psoriasis.

14. (new) The method of claim 13 wherein the inflammatory disease is asthma, an allergy, respiratory distress syndrome, or acute or chronic pancreatitis.

15. (new) The method of claim 13 wherein the destructive bone disorder is osteoporosis, osteoarthritis, or multiple myeloma-related bone disorder.

16. (new) The method of claim 13 wherein the proliferative disorder is acute or chronic myelogenous leukemia, Kaposi's sarcoma, metastatic melanoma, or multiple myeloma.

17. (new) The method of claim 13 wherein the neurodegenerative disorder is Parkinson's disease, Alzheimer's disease, cerebral ischemia, or a neurodegenerative disease caused by traumatic injury.

18. (new) The method of claim 13 wherein the viral disease is hepatitis A infection, hepatitis B infection, hepatitis C infection, HIV infection, or CMV retinitis.

19. (new) The method of claim 13 wherein the infectious disease is septic shock, sepsis, or Shigellosis.

20. (new) The method of claim 13 wherein the condition associated with prostaglandin endoperoxidase synthetase-2 (COX-2) is edema, analgesia, neuromuscular pain, headache, dental pain, arthritis pain, or pain caused by cancer.

21. (new) The method of claim 13 wherein the disease or disorder associated with the production of TNF is rheumatoid arthritis, rheumatoid spondylitis, osteoarthritis, gouty arthritis, sepsis, septic shock syndrome, adult respiratory distress syndrome, cerebral malaria, chronic pulmonary inflammatory disease, silicosis, pulmonary sarcoidosis, bone resorption disease, reperfusion injury, graft vs. host reaction, allograft rejections, fever and myalgias due to infection, cachexia secondary to infection, AIDS, ARC or malignancy, keloid formation, scar tissue formation, Crohn's disease, ulcerative colitis, pyresis, HIV, CMV, influenza, herpes.

22. (new) The method of claim 13 wherein the disease or disorder associated with the production of TNF is infection by a veterinary virus selected from equine infectious anemia virus, caprine arthritis virus, visna virus, maedi virus, feline immunodeficiency virus, bovine immunodeficiency virus, and canine immunodeficiency virus.

23. (new) The method of claim 13 wherein the disease or disorder associated with the production of IL-1 is rheumatoid arthritis, osteoarthritis, psoriatic arthritis, traumatic arthritis, rubella arthritis, inflammatory bowel disease, stroke, endotoxemia, toxic shock syndrome, inflammatory reaction induced by endotoxin, diabetes, pancreatic  $\beta$ -cell disease, Alzheimer's disease, tuberculosis, atherosclerosis, muscle degeneration, or cachexia.

24. (new) The method of claim 13 wherein the disease or disorder associated with the production of IL-8 is psoriasis; inflammatory bowel disease; asthma; cardiac, brain, or renal reperfusion injury; adult respiratory distress syndrome; thrombosis; or glomerulonephritis.

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**PATENT**

**Application No.: 10/561,052**

**Preliminary Amendment - First Action Not Yet Received**

25. (new) The method of claim 13 wherein the disease or disorder associated with the production of IL-6 or IL-8 is an infection caused by human rhinovirus (HRV), an enterovirus, a coronavirus, an influenza virus, a parainfluenza virus, a respiratory syncytial virus, or an adenovirus.